## Message

From: Modak, Nabanita [Modak.Nabanita@epa.gov]

**Sent**: 1/22/2018 5:44:18 PM

To: Owens, Katharine [Owens.Katharine@epa.gov]; Ayres, Sara [Ayres.Sara@epa.gov]

CC: Gordon, Michael [Gordon.Mike@epa.gov]

Subject: FW: Coaltec gasification of municipal biosolids

Attachments: MaxWest letter from the EPA.pdf; 735 - Waste Gasification Facilities - PA.pdf; NOP-5034-1-1.pdf - Final - Dec.

2016.pdf; Efficiencies of MTT4.pdf; Region 3 Ruling re Section 112.pdf

Katie and Sara,

I do not know how it went under my radar. I am going to send my thoughts shortly.

Mike,

Marcia is doing a detail as a branch chief and Katie is filling in for her for SSI and OSWI as she is also in a detail in OECA. I copied Sara as she is CISWI OECA contact.

Thanks Nabanita

From: Gordon, Michael

Sent: Tuesday, January 16, 2018 12:46 PM

To: Modak, Nabanita < Modak. Nabanita@epa.gov>; Mia, Marcia < Mia. Marcia@epa.gov>

Subject: FW: Coaltec gasification of municipal biosolids

More info from Coaltec sent in a follow up email.

-Mike

Mike Gordon
Environmental Engineer
Office of Permits and State Programs
Air Protection Division
EPA Region III
1650 Arch Street
Philadelphia, PA 19103
(215)-814-2039
Gordon.Mike@epa.gov

From: Peter Thomas [mailto:pthomas@manuregy.com]

**Sent:** Tuesday, January 16, 2018 12:36 PM **To:** Gordon, Michael < <u>Gordon.Mike@epa.gov</u>> **Subject:** Coaltec gasification of municipal biosolids

Mike,

Naturally, it would be very helpful if we had a letter ruling from Ed Messina, Mia Marcia or someone at EPA headquarters, rather than having to ask for a letter ruling from each Region (see attached 2013 letter).

Here is the current cost for ALCOSAN (Pittsburgh) to dispose of their non-incinerated wet biosolids, and it appears that this is similar to the cost other WWTPs incur every day for disposing of their biosolids: 110 wet tons per day x 365 days = 40,150 wet tons per year x \$35 per ton = \$1,405,250 per year, plus 10 tons of lime per day x 365 days per year = 3,650 tons per year x \$140 per ton = \$511,250 per year, for a total of

\$1,916,250 per year (\$47.73 per wet ton). The minimum price for commercial activated carbon use in WWTP's is \$1,600 per ton, FOB Texas or Kentucky, so producing low-cost Ecochar® powder activated carbon from biosolids and using it on-site is a very attractive alternative to paying nearly \$2 million per year to dispose of the biosolids and getting no operational benefit in return.

As an aside, attached are the four USDA and EPA environmental standards for our oxygen-starved waste gasification system, one of which is the August 2017 letter from you:

- U.S. Department of Agriculture Conservation Practice Code 735 ("Waste Gasification Facility" attached).
- U.S. Department of Agriculture National Organic Program approved for the production of biochar from animal wastes (see "NOP-5034-1-1" document attached).
- EPA Region 3 approved agricultural Best Management Practice for preventing nutrient run-off into the Chesapeake Bay (see "Efficiencies of MTT4" document attached).
- EPA Region 3 approved for processing non-hazardous secondary material (attached).

Please don't hesitate to call if you have any guestions.

Regards,

Peter Thomas Coaltec Energy USA, Inc. 434-989-1417 (Cell) www.coaltecenergy.com

From: Gordon, Michael [mailto:Gordon.Mike@epa.gov]

**Sent:** Tuesday, January 16, 2018 11:53 AM **To:** Peter Thomas <a href="mailto:pthomas@manuregy.com">pthomas@manuregy.com</a>>

Subject: RE: Coaltec gasification of municipal biosolids

Hi Peter,

Thanks for your email. We are coordinating rule applicability with headquarters and will respond to you via letter.

-Mike

Mike Gordon
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1650 Arch Street
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(215)-814-2039
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From: Peter Thomas [mailto:pthomas@manuregy.com]

Sent: Monday, January 15, 2018 12:04 PM

To: Fernandez, Cristina < Fernandez. Cristina@epa.gov>; Gordon, Michael < Gordon. Mike@epa.gov>

Subject: Coaltec gasification of municipal biosolids

Cristina and Michael,

In late 2016, I wrote to Region 3 requesting that you confirm that when we process poultry litter to produce steam-activated carbon, our high-temperature, refractory-lined, oxygen-starved gasification process falls under Section 112 (Non-Hazardous Secondary Materials) of the Clean Air Act (see your letter dated December 5, 2016). You confirmed that when processing poultry litter, our gasification system and process fall under Section 112 in your Letter Ruling to us dated August 17, 2017 (see attached).

We are now in early-stage discussions with the Allegheny County Sanitation Authority (ALCOSAN wastewater plant), 3300 Preble Avenue, Pittsburgh, PA 15233 about drying and processing approximately 110 wet tons of their biosolids per day using exactly the same Coaltec Energy model refractory-lined, oxygen-starved gasification system (see attached drawing). We also intend to hold discussions with other large municipal wastewater treatment plants about processing their biosolids in order to produce low-cost powder activated carbon. The low-cost Ecochar® powder activated carbon (PAC) would be used on-site by these wastewater treatment plants for adsorbing pharmaceuticals, pesticides, and hormones before these and other organic contaminants are discharged in their effluent. In the labs at Calgon Carbon Corporation (Pittsburgh), we have demonstrated that our low-cost PACs adsorb these organic micro-contaminants, and that when the PAC is produced at 1,800° F, micro-nutrients such as phosphorus are extremely tightly bound and therefore do not leach into the water.

We would appreciate it if you would confirm that drying and processing municipal biosolids at ~982° C (~1,800° F) in our refractory-lined, oxygen-starved gasification system also falls under Section 112 of the Clean Air Act. If you concur, we would appreciate it if you would confirm this in a letter ruling.

Regards,

Peter Thomas Coaltec Energy USA, Inc. 434-989-1417 (Cell) www.coaltecenergy.com